Title:	A New Image Reconstruction Method for Electrical Charge Tomography System
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Abstract:	Image reconstruction is vital for process tomography system. Due to industrial demand for process monitoring and control of solid transport in pneumatic conveyor, electrical charge tomography system using electrostatic charge carried by particles has become vital and attract the attention of many researchers. Three image reconstruction algorithm methods known as linear back projection, filtered back projection and least square methods are actively discussed by researchers. In this paper, a new image reconstruction algorithm called least square with regularization (LSR) method will be introduced to improve the previously mentioned method applied in electrical charge tomography. Simulation and experimental data had been used to reconstruct the image. The results were compared and it indicated that LSR method showed better improvement in terms of stability and accuracy of the image.